DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING SERVICES
Office of Structural Materials
Quality Assurance and Source Inspection

Bay Area Branch
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Contract #: 04-0120F4
Cty: SF/ALA Rte: 80 PM: 13.2/13.9
File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary
Address: 333 Burma Road
City: Oakland, CA 94607

Report No: WIR-013842
Date Inspected: 07-May-2010

Project Name: SAS Superstructure
Prime Contractor: American Bridge/Fluor Enterprises, a JV
Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island

OSM Arrival Time: 700
OSM Departure Time: 1900
Location: Shanghai, China

CWI Name:				**CWI Present:**	☐ Yes	☑ No		
Inspected CWI report:	☐ Yes	☐ No	☑ N/A	**Rod Oven in Use:**	☐ Yes	☐ No	☑ N/A	
Electrode to specification:	☐ Yes	☐ No	☑ N/A	**Weld Procedures Followed:**	☐ Yes	☐ No	☑ N/A	
Qualified Welders:	☐ Yes	☐ No	☑ N/A	**Verified Joint Fit-up:**	☐ Yes	☐ No	☑ N/A	
Approved Drawings:	☐ Yes	☐ No	☑ N/A	**Approved WPS:**	☐ Yes	☐ No	☑ N/A	
				Delayed / Cancelled:	☐ Yes	☑ No	☐ N/A	

Bridge No: 34-0006
Component: OBG Trial Assembly

Summary of Items Observed:

On this date Caltrans OSM Quality Assurance (QA) Inspector, S. Manjunath Math was present during the time noted above for observations relative to the work being performed.

This QA Inspector randomly observed the following work in progress:

Orthotropic Box Girder (OBG) Trial Assembly Areas

Segment 7EE to 8AE (Skin Flatness) Joint Survey

This QA Inspector performed Joint Inspection with ABF Survey Team for the Skin Flatness between Segment 7EE to 8AE (Field Segment Splice) between Panel Point (PP) 60 and PP 61.

Cross Beam side at B1 and B2 locations and Bike Path side at B3 and B4 Locations at weld connecting Bottom Panel to Side Panel with 5000mm String line for overall deformation and 600mm and 630 mm Straight Edge for localized deformation and

Cross Beam side at T1 location and Bike Path side T2 Location at weld connecting Deck Panel to Edge Panel with 5000mm String line for overall deformation and 600mm and 630 mm Straight Edge for localized deformation. The measured and recorded readings were submitted to the Lead and Engineer for review.

Segment 7EW to 8AW (Root Gap and Offset)

This QA Inspector performed dimension Inspection along with Caltrans QA Mr. Manikandan for the Root Gap and Offset for Segment 7EW to 8AW (Field Segment Splice) between Panel Point (PP) 60 and PP 61 at the following locations

Deck Panel from work point W2 to W5.

Edge Panel from work point W5 to W6.

Side Panel from work point W6 to W4.

Bottom Panel from work point W4 to W3.

Side Panel from work point W3 to W1.

Edge Panel from work point W2 to W5.

The measured and recorded readings were submitted to the Lead and Engineer for review.

Segment 7EW to 8AW (U-Ribs)

This QA Inspector performed dimension Inspection along with Caltrans QA Mr. Manikandan for the U-Ribs to U-Ribs (Total 39 nos.) for Segment 7DW to 7EW (Shop Segment Splice) between Panel Point (PP) 58 and PP 59 from Counter Weight side towards Cross Beam side. The measured readings were submitted to the Task Leader and Engineer for review.

Rotation Capacity Test

This QA Inspector witnessed Rotation Capacity (R.C) performed by ZPMC at 8CW between Panel Point (PP) 69 to PP 69.5 for the Bolt size M16 x 40 R.C. # DHGM160020 the bolts were snug tightened then rotated to 180 degree with Torque value 200 N-m and then Bolt was rotated further to 360 degree with Torque value 300 N-m and Finally concluded that 230 N-m shall be utilized for tension verification test at field.

The measured and recorded readings were submitted to the Lead and Engineer for review.

Rotation Capacity Test

This QA Inspector witnessed Rotation Capacity (R.C) performed by ZPMC at Skid More tester at Bay No. 11 and Finally concluded that 1277 N-m shall be utilized for tension verification test at field.
The measured and recorded readings were submitted to the Lead and Engineer for review.

Traveler Rail

This QA Inspector performed dimension Inspection along with Caltrans QA Mr. Manikandan for the Traveler Rail

Bracket 11TR2-007-001~014 at Bay #3 and 11TR3-011-001~014 at Bay #3 measured the following

Rail Length

Rail Longitudinal Elevation

Rail Sweep

Thickness at Typical Section

Thickness at Sliding Section

Flange width at typical section

Flange width at Sliding Connection

Flange Width at sliding connection

Web to Flange Offset

Depth Typical Section

Depth Sliding Section

Flange Tilt

Cut Angle at Sliding Connection

The measured and recorded readings were submitted to the Lead and Engineer for review.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

Summary of Conversations:

No relevant conversations.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric T Sang 1500-0042-2372, who represents the Office of Structural Materials for your project.

Inspected By:	Math,Manjunath	Quality Assurance Inspector
Reviewed By:	Carreon,Albert	QA Reviewer